

## Further new African Membracidae (Hemiptera: Homoptera)

by

A. L. CAPENER

Plant Protection Research Institute, Pretoria

The following new species of Membracidae from Africa south of the Sahara are described and figured: *Negus newtoni*, *Lanceonotus crassicornis*, *Eumonocentrus sinuatus*, *Anchonobelus magnificus*, *Tricoceps laconus*, *Acanthophyes kenyensis*, *A. rarus*, *Distantobelus humilis*, *Vecranotus ivoriensis*, *Leprechaunus humilis* and *L. longicornis*.

Eleven new species of Membracidae from Southern, East, West and Central Africa are described here. Types are lodged in various Institutions: National Collection of Insects, Pretoria (N.C.I.); Coryndon Museum and Scott Research Institute, Nairobi; Museum National de l'Histoire Naturelle, Paris (M.N.H.N.); Musée Royal de l'Afrique Centrale, Tervuren (M.R.A.C.); and the Office de la Recherche Scientifique et Technique Outre-Mer, Abidjan (O.R.S.T.O.M.) as recorded in the text. All measurements are in mm.

### CENTROTINAE

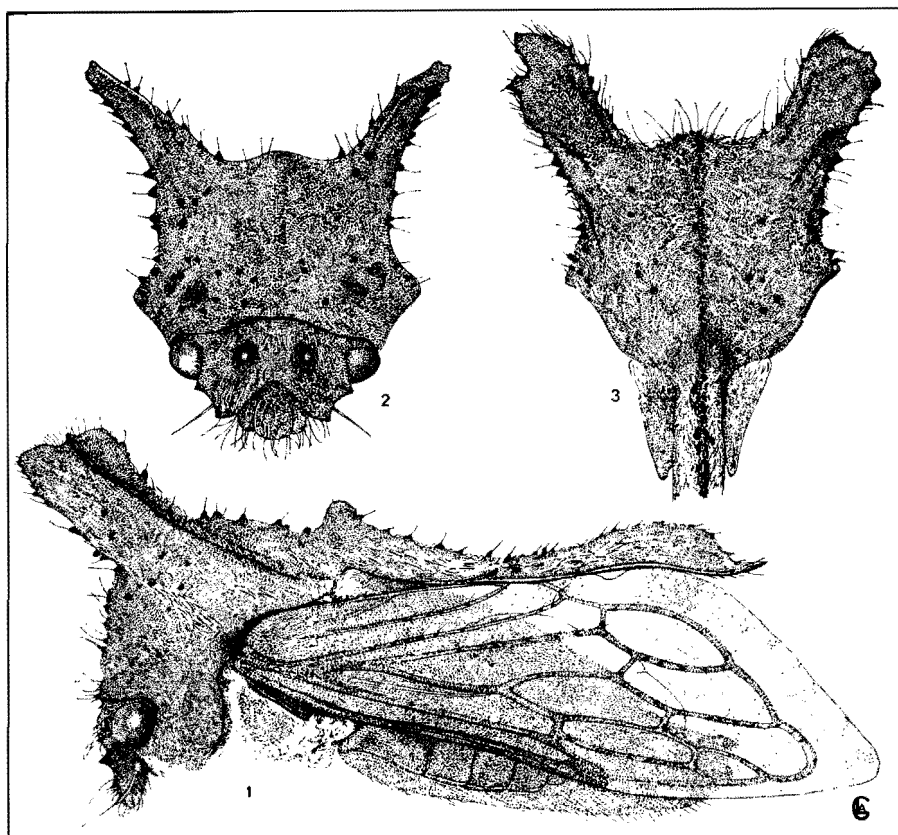
#### XIPHOPOEINI

#### *Negus newtoni* spec. nov., figs 1-3

Nearest to *N. asper* Jacobi (1910), from which it differs in the forwardly directed horns.

**FEMALE.** Head black, vertex about 1.6 times wider than long, punctate and granulate with long tawny recumbent hairs; upper margin weakly arcuate, lower margins with two pointed projections on each side and a little frontally curved. Eyes dark brown, ocelli dark brown set at sides of a central raised area slightly obliquely away from each other and situated about on the centro-ocular line, very slightly closer to eyes than to each other. Frontoclypeus about vertical, somewhat swollen, a little wider across lobes than long, extending about half its length below lower margins of vertex, lobes broadly rounded apically but not extending to tip which is backwardly horizontally turned and somewhat swollen, pilosity long and tawny. Antennae basally ochraceous brown, flagellum pale brown.

Pronotum black, punctate and granulate with scattered tubercles and adpressed to erect long tawny hairs, with white tomentous hairs behind horns and on posterior process; median carina percurrent and tuberculate but somewhat obscure on metopidium which is vertical and about twice as wide as high; supraocular callosities obscure. Humeral angles prominent and blunt, posterior angles rounded, posterior margin arcuate over base of scutellum, lateral carinae of horns produced to posterior angles. Suprahumeral horns somewhat dorso-ventrally compressed, tricarinate, directed forwards and upwards extending well beyond metopidium, slightly divergent and extending outwards a little beyond humeral angles, a little longer than distance between



Figs 1-3. *Negus newtoni* spec. nov. ♀. 1. lateral aspect. 2. frontal aspect. 3. dorsal aspect.

their bases, all carinae strongly tuberculate, apical terminations somewhat foliate and irregular, the right not necessarily matching the left. Posterior process horizontal and weakly sinuate, emerging from posterior margin and behind disc and rising to a low point above base of scutellum, contiguous with scutellum and anal margins of tegmina, tectiform in section with lateral carinae somewhat obscure, very weakly laterally ampliate in middle, apical fourth dorsally expanded, curved and laterally compressed, terminating in a sharp recurved point which extends about as far as extremity of abdomen, ventral surface planate. Scutellum triangular, slightly wider than long, basally swollen with tomentose white hairs at basal angles, apically strongly concavely emarginate, apices somewhat finger-like and blunt. Tegmina 2.5 times longer than wide, translucent, pale brownish with a clear spot just before anal angle, somewhat irregularly mottled with darker brown especially on limbus, veins brown with small black tubercles each bearing a black bristle, subcosta thickened at R1 and forming an incipient pterostigma, apical limbus broad, tip rounded. Sides of meso and metathorax with

dense white tomentum. Legs basally black, tibiae and tarsi brown. Abdomen dark brown and coarsely punctate above, sternites black with short pilosity.

MALE. Similar to female.

Host plant and nymph unknown.

*Measurements.* Frontal margin to tips of tegmina ♂ 5,95, ♀ 6,73–8,18 to tip of posterior process ♂ 4,88, ♀ 6,93; expanse of horns ♂ 3,24, ♀ 3,70–3,96, width at humeral angles ♂ 3,24, ♀ 3,70–3,96, at eyes ♂ 1,72, ♀ 1,92–2,18.

*MATERIAL EXAMINED.* 3 ♀ 1 ♂: ♀-holotype, Qudeni, 17 Nov. 1957, ♂-paratype Nqutu, 14 Oct. 1949, Zululand, A. H. Newton; 2 ♀-paratypes Umtentweni, Natal, July 1951, D. Hatting, and 8–10 Feb. 1962, A. L. Capener, in N.C.I.

I have pleasure in dedicating this species to its discoverer, the late Dr A. H. Newton.

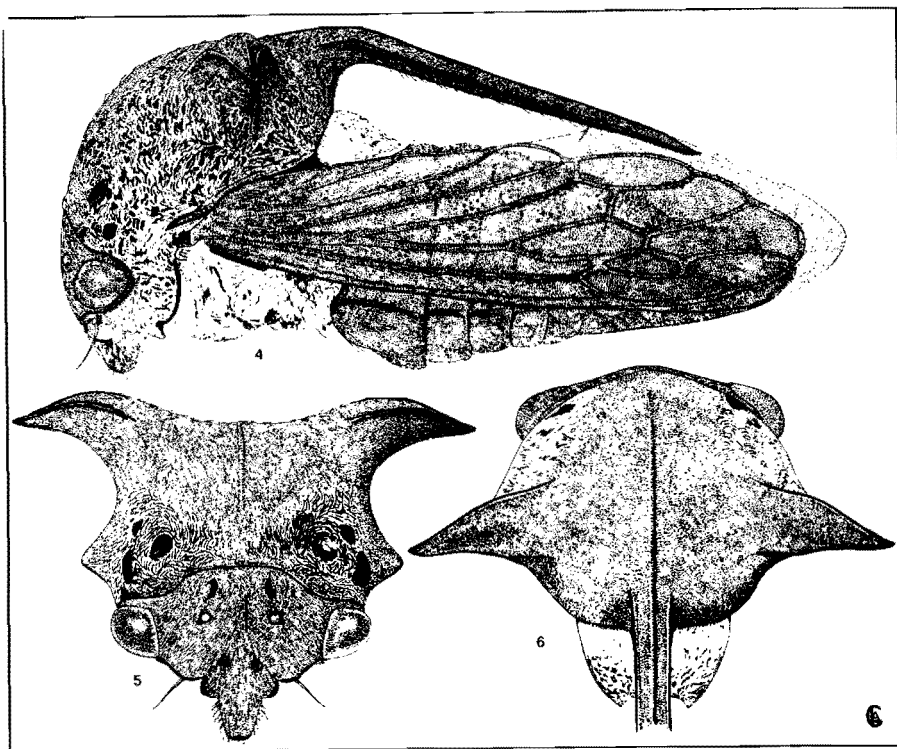
#### LEPTOCENTRINI

#### *Lanceonotus crassicornis* spec. nov., figs 4–6

Nearest to *L. breviscutus* Capener (1971), but differing in the thicker apically decurved suprahumeral horns.

FEMALE. Head vertical, vertex 1,6 times wider than long, black, subplanate, finely punctate, densely pilose with adpressed golden hairs, an impunctate lunate spot above each ocellus, upper margin arcuate and sinuate, lower margins carinate, obliquely curving to frontoclypeus. Eyes elongately hemispherical, vitreously succineous, ocelli pale succineous, closer to eyes than to each other and situated above the centro-ocular line. Frontoclypeus slightly declivous, one and a third times longer than wide across lobes, extending more than half its length below lower margins of vertex, tip carinate slightly upturned and truncate, rather densely pilose, lobes extending to about half its length, their lower margins transverse and laterally rounded. Antennae brownish, genae densely covered with white tomentum.

Pronotum black, finely punctate with short adpressed pilosity, around supra-ocular callosities, humeral angles and behind horns the hairs are thick, white and rather dense; median carina rather weakly percurrent. Metopidium inclining convexly backwards, one and a third times wider than high, supraocular callosities broken and made conspicuous by the dense white tomentose hairs which surround them, humeral angles prominent and blunt with a short oblique anterior carina, posterior angles rounded, posterior margin transverse and a little arcuate over base of scutellum. Supra-humeral horns emerging above and behind humeral angles, very robust, longer than distance between their bases, tricarinate, rising slightly above level of disc and directed outwards, their tips weakly decurved, a short apical carina medially between anterior and lateral carinae, dorsal surface strongly convex and punctate, lateral and posterior surfaces weakly convex. Posterior process emerging behind disc and above posterior margin, scarcely rising above level of disc high above scutellum and descending to impinge on anal angles of tegmina, straight and quadricarinate, about uniform in girth, acuminate apically to sharp tip which extends about as far as extremity of fifth apical cell of tegmina. Scutellum about 1,7 times wider than long, base strongly convex, densely covered with thick matted white tomentum, tip broadly shallowly concavely emarginate, apices acute but not sharp. Tegmina three times as long as wide, clear



Figs 4-6. *Lanceonotus crassicornis* spec. nov. ♀. 4. lateral aspect. 5. frontal aspect. 6. dorsal aspect.

hyaline with apical third pale amber-tinted, basal fifth coriaceous and punctate with short whitish to pale golden hairs, veins brown margined with pale golden hairs, limbus moderately broad, tip subacutely rounded. Legs brown with coxae black covered with white tomentum. Sides of thorax densely covered with white tomentum. Abdomen greyish with fine black puncturation above, tergites brown with short golden and white pilosity, terminalia black.

MALE. Unknown.

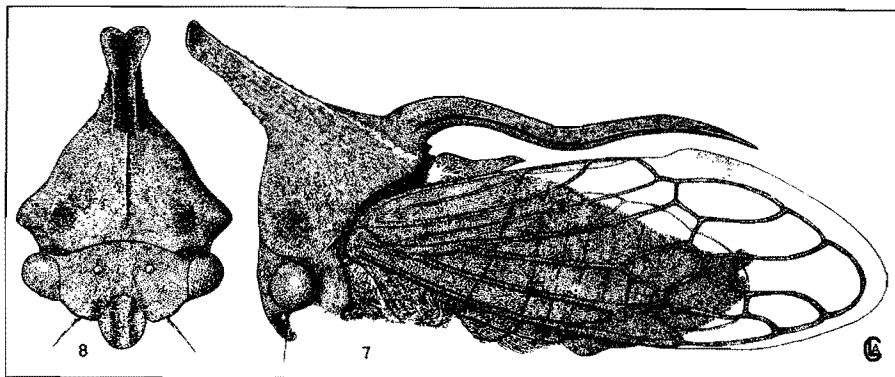
*Measurements.* Lateral: frontal margin to tips of tegmina 8,58-8,84, to tip of posterior process 7,13-7,79; frontal: expanse of horns 5,35-6,16, width at humeral angles 3,76-4,03, at eyes 3,04-3,24.

*MATERIAL EXAMINED.* 2 ♀: holotype and paratype from Salisbury, Rhodesia, 31 Oct. 1965, A. J. Duke, in N.C.I.

#### CENTROTINI

***Eumonocentrus sinuatus*** spec. nov., figs 7, 8

Differing from all other known members of the genus in the sinuate posterior process distant from the scutellum.



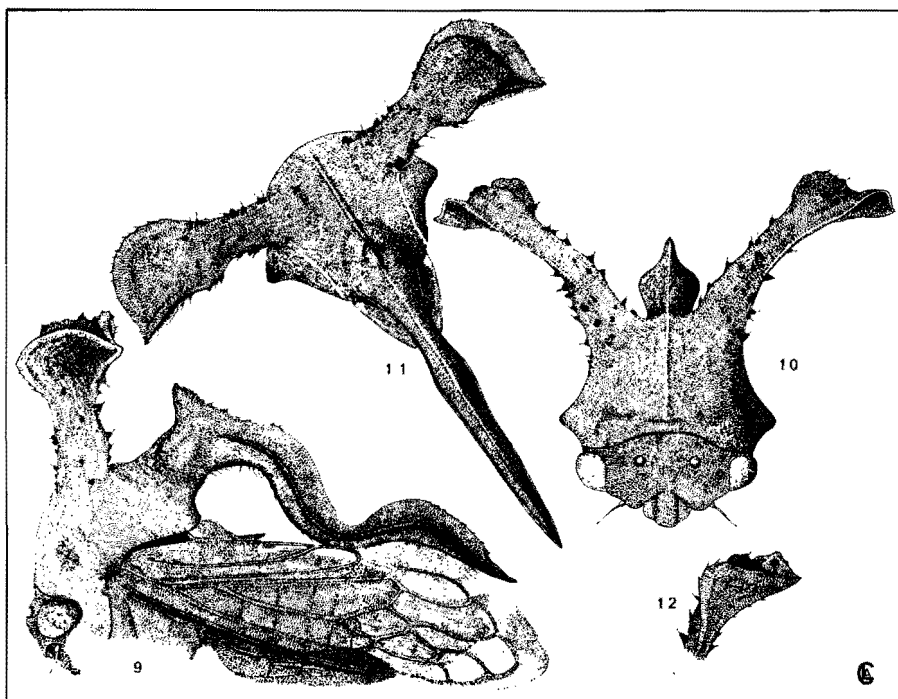
Figs 7-8. *Eumonocentrus sinuatus* spec. nov. ♀. 7. lateral aspect. 8. frontal aspect.

**FEMALE.** Head vertical; vertex about 1,7 times wider than long, dark chestnut brown, subplanate, finely punctate with short adpressed sordid hairs; upper margin arcuate and sinuate, lower margins a little obliquely curved to frontoclypeus. Eyes subglobose, sordid succineous, ocelli succineous, a little closer to eyes than to each other and situated slightly above the centro-ocular line. Frontoclypeus declivous, suboval, tip rounded, lobes entirely fused and extending to tip, sutures broadly impunctate. Antennae with basal segments ochraceous, flagellum brown.

Pronotum subconical, dark brown, finely punctate with very short adpressed hairs, median carina percurrent; metopidium vertical, wider than high, supraocular callosities somewhat obscure, humeral angles blunt, posterior angles rounded, posterior margin transverse and arcuate over base of scutellum; lateral carinae of horns weakly continued over pronotum to posterior angles and covered with somewhat tomentose white hairs. Suprahumeral horns emerging contiguously from disc and directed forwards at about an angle of 45°, tricarinate, posterior carinae contiguous and concealed; from lateral aspect tapering to tip and about 2,5 times longer than width at base; anterior and lateral carinae with minute seta-bearing tubercles, tips rounded and weakly outwardly turned. Posterior process emerging far back on pronotum and very slightly cephalad of posterior margin, arching above scutellum and sinuate to tip, tricarinate and very gradually acuminate to sharp tip which extends about as far as extremity of abdomen; tectiform above lateral carinae and rounded below. Scutellum about as long as wide, dark brown, finely punctate with short adpressed transverse hairs and somewhat matted tomentose hairs at basal angles, weakly convex at base and planate to tip which is broadly concavely emarginate, apices acute. Tegmina three times as long as wide, clear hyaline, basal seventh coriaceous and punctate with very short adpressed hairs, veins and pterostigma brown; pterostigma about three times as long as wide; a pale suffusion on limbus at fifth apical cell, limbus moderately broad, tip subacutely rounded. Sides of thorax with sparse tomentose hairs; legs castaneous with basal segments black.

**MALE.** Unknown.

**Measurements.** Lateral: frontal margin to tips of tegmina 5,88-6,15, to tip of posterior process 4,95-5,02, humeral angles to tips of horns 2,51-2,97; frontal: width across tips of horns 0,48-0,66, at humeral angles 2,28-2,31, at eyes 1,98-2,04.



Figs 9–12. *Anchonobelus magnificus* spec. nov. ♀. 9. lateral aspect. 10. frontal aspect. 11. dorsal aspect. 12. tip of right horn posterior aspect.

**MATERIAL EXAMINED:** 2 ♀ from Kenya: holotype coll. R. H. Le Pelley (No. 2042) 1929, paratype from Karen, Nairobi, May 1949, coll. E. Pinhey. Holotype in Scott Research Institute, paratype in Coryndon Museum.

***Anchonobelus magnificus* spec. nov., figs 9–12**

Nearest to *A. dschagga* (Jacobi, 1910), from which it differs in the longer more slender horns and the dorsal expansion of the apical third of the posterior process.

**FEMALE.** Head vertical; vertex dark brown, 1,6 times wider than long, weakly moulded, finely punctate with short adpressed tawny hairs, upper margin arcuate and sinuate and slightly frontally projecting, lower margins a little frontally curved and sloping to frontoclypeus. Eyes subglobose, pale brownish succineous, ocelli succineous, a little closer to eyes than to each other, situated above the centro-ocular line and set a little obliquely to each other. Frontoclypeus declivous, oval, lobes entirely fused to rounded tip, extending about two-thirds its length below lower margins of vertex. Antennae brownish.

Pronotum dark brown, finely punctate with short adpressed tawny hairs; median carina percurrent, metopidium vertical, 1,8 times wider than high, supraocular

callosities irregular; humeral angles prominent and blunt, posterior angles obtusely rounded, posterior margin transverse and arcuate over base of scutellum; lateral carinae of horns weakly continued to posterior angles and bearing sordid white hairs. Supra-humeral horns extending upwards and outwards, four times as long as distance between their bases, bearing numerous black tubercles each terminating in a bristle, somewhat obscurely tricarinate basally; apical half strongly tricarinate and broadly foliately expanded, the carinae flattened and keel-like, dorsal surface strongly convex, posteriorly concave and laterally weakly so, extreme tip acute. Posterior process robustly emerging behind horns and cephalad of posterior margin, laterally bulbously swollen, curving backwards high above scutellum, anteriorly with a short acute laterally compressed process, quadricarinate and strongly sinuate, impinging on anal margins of tegmina before anal angle and following curve of tegmina, very weakly laterally ampliate beyond tip of scutellum, apical third dorsally expanded in a strong laterally compressed curve and terminating in a sharp point slightly beyond extremity of abdomen; lateral, ventral and dorsal carinae strongly developed. Scutellum triangular, wider than long, dark brown, shortly pilose, strongly convex in middle at base, a small area of white tomentum at each basal angle, tip with a deep "U"-shaped emargination, apices acute. Tegmina about 2.8 times longer than wide, brownish subhyaline with darker maculae at anal angle and preapically on limbus, veins pale brown and strongly raised, subcosta and pterostigma dark brown to blackish, pterostigma four times as long as wide, thick, apical limbus broad, tip somewhat acutely rounded. Sides of thorax, legs and abdomen dark brown.

MALE. Similar to female but tegmina uniform dark brown with a clear hyaline fascia from pterostigma to anal angle, and horns less elevated and more divaricate.

*Measurements.* Lateral: frontal margin to tips of tegmina ♂ 5.08–5.35, ♀ 5.68, to tip of posterior process ♂ 4.75–5.08, ♀ 5.35; frontal: expanse of horns ♂ 4.88–5.08, width at humeral angles ♂ 2.05–2.24, ♀ 2.31, at eyes ♂ 1.78, ♀ 1.94.

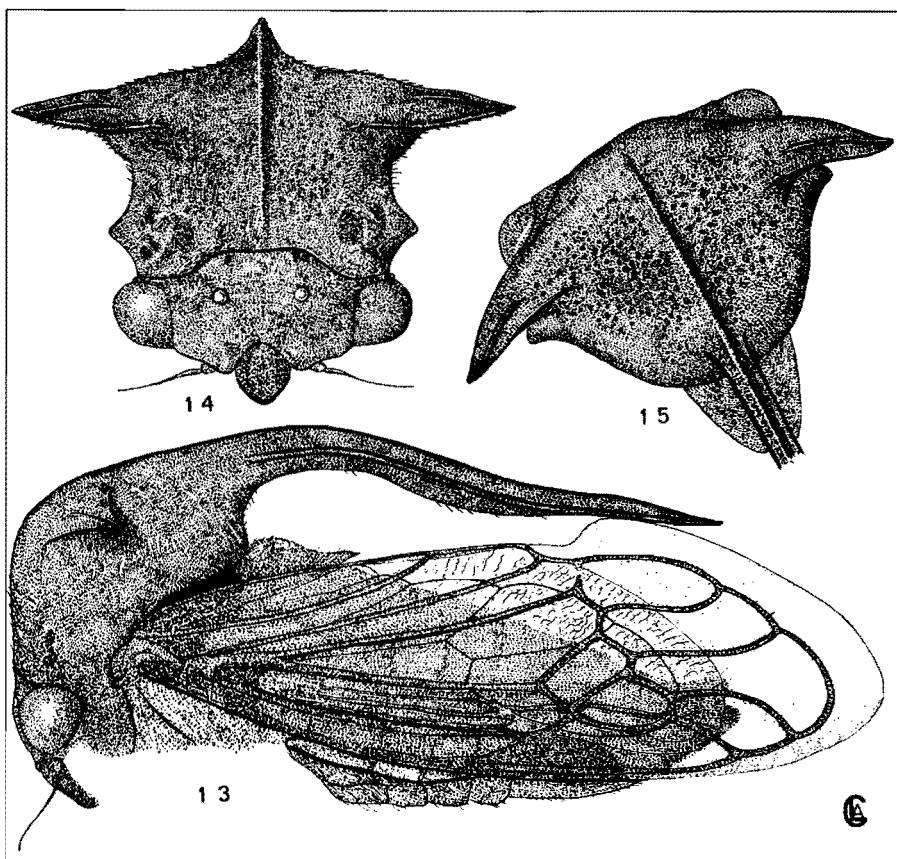
MATERIAL STUDIED: 1 ♀ 2 ♂ from Zanzibar: ♀-holotype 30 Sept. 1933, 2 ♂ paratypes 30 Aug. 1955, coll. F. L. Vanderplank, in N.C.I.

***Tricoceps laconus*** spec. nov., figs 13–15

Nearest to *T. argutus* Capener (1966) but differing in the horizontal horns and slightly less arcuate posterior process.

FEMALE. Head vertical; vertex 1.5 times wider than long, black, weakly moulded, finely punctate with short adpressed pale golden hairs; upper margin arcuate and sinuate, lower margins weakly sloping to frontoclypeus. Eyes subglobose, dark succineous to brown, ocelli dark succineous, closer to eyes than to each other and situated above the centro-ocular line. Frontoclypeus declivous, slightly longer than wide, lobes entirely fused and impunctate except along their lateral margins, tip carinate and bluntly acute. Antennae pale brown.

Pronotum black, strongly punctate especially on disc, with recumbent pale golden pilosity; median carina strongly percurrent; frontal margin carinate, metopidium vertical, about twice as wide as high, supraocular callosities large, flat and impunctate broken by scattered hairs; humeral angles prominent and blunt, posterior angles regularly rounded, posterior margin transverse and weakly arcuate over base of scutellum.



Figs 13–15. *Tricoceps laconus* spec. nov. ♀. 13. lateral aspect. 14. frontal aspect. 15. dorsal aspect.

Suprahumeral horns horizontal, broad at base and acuminate to sharp tips, about as long as distance between their bases, tricarinate with a short medio-dorsal carina; from dorsal aspect anterior margins curving backwards and posterior margins only slightly so; lateral carina half as long as posterior carina and about in same vertical plane; dorsal surfaces about planate, lateral and posterior surfaces basally convex then planate to tip. Posterior process emerging from disc and well above posterior margin, rising slightly and weakly arcuate high above scutellum then descending slightly and becoming horizontal at apical third, impinging on anal angles of tegmina and extending about as far as extremity of abdomen; strongly tricarinate with median carina forming a distinct ridge, ventral surface "V"-shaped, about uniform in girth and acuminate for apical third to sharp tip. Scutellum almost as long as wide, black, finely punctate with recumbent adpressed transverse hairs, a little swollen medially at base, tip concavely emarginate, apices acute. Tegmina almost three times as long as wide, pale amber



hyaline with a darker spot on limbus at anal angle, base black coriaceous and punctate, veins dark brown, pterostigma black and about 3,5 times longer than wide, apical limbus broad, tip rounded. Hind wings with strong dark brown veins. Legs black with tarsi pale brown.

MALE. Unknown.

*Measurements.* Lateral: frontal margin to tips of tegmina 6,60–7,06, to tip of posterior process 5,54–5,87; frontal: width across tips of horns 3,90–4,03, at humeral angles 2,51–2,64, at eyes 2,24–2,37.

MATERIAL EXAMINED. 3 ♀ from West Africa, Foufa Djallon, Kolanguelle, Exped. Mus. G. Frey, French Guiana, June 1951, collected Bechyne: holotype on 6th; 1 ♀-paratype on 7th, and 1 ♀-paratype 13th–14th. Holotype and one paratype in M.N.H.N. and one paratype in N.C.I.

***Acanthophyes kenyensis* spec. nov., figs 16–18**

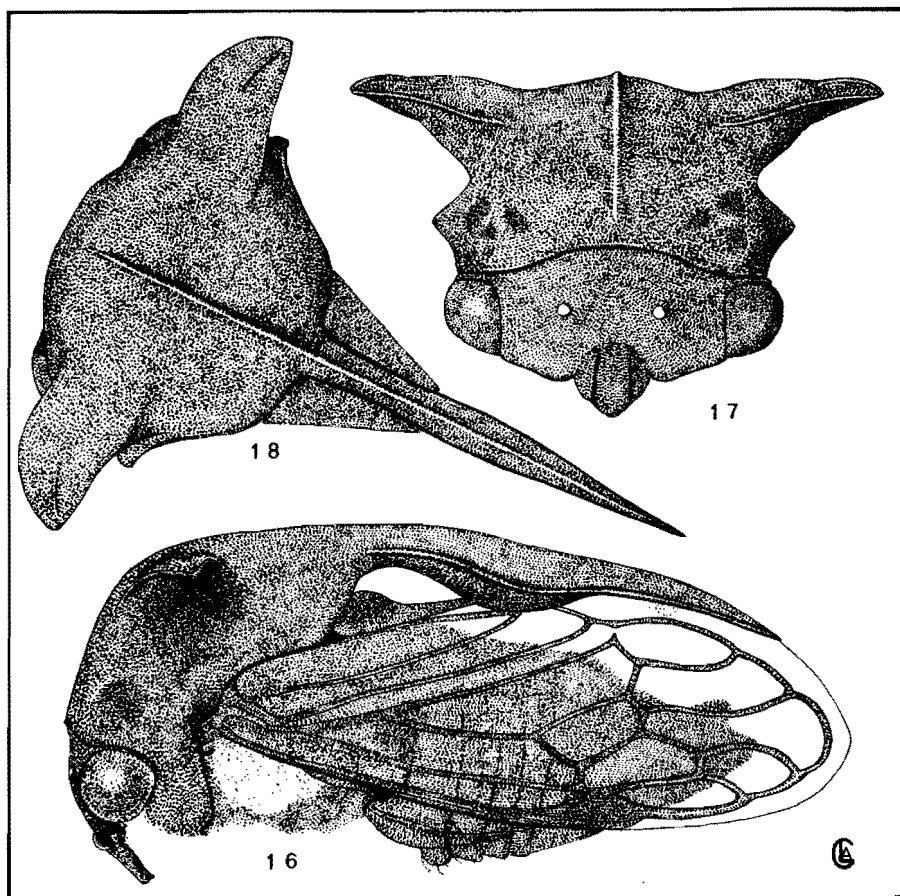
Nearest to *A. decens* Capener (1971), but differing in the longer horizontal horns and larger pterostigma.

FEMALE. Head vertical; vertex about 1,8 times wider than long, reddish brown to blackish, finely punctate with micro-hairs, subplanate, upper margin weakly arcuate and sinuate and a little obumbrant, lower margins sloping and curved to frontoclypeus. Eyes subglobose, brownish, ocelli succineous, very slightly closer to eyes than to each other and situated about on the centro-ocular line. Frontoclypeus declivous, suboval, about as wide as long, lobes entirely fused, tip rounded into lobes. Antennae pale brownish.

Pronotum dark brown, finely punctate with micro-hairs, median carina strongly percurrent; metopidium very slightly receding, about twice as wide as high, supraocular callosities somewhat obscure, blackish; humeral angles prominent and blunt, posterior angles obtusely rounded, posterior margin curving a little backwards and a little arcuate over base of scutellum. Suprahumeral horns robust, horizontal, about as long as distance between their bases and about 1,7 times longer than wide at base, tricarinate, dorsal and posterior surfaces about planate, lateral surface basally convex and planate at tip, anterior carinae curved, tip subacute. Posterior process emerging behind disc in same plane and weakly arcuate from posterior margin over scutellum, tricarinate, ventrally ampliate and weakly laterally expanded in middle, impinging on apex of scutellum then contiguous with margins of tegmina, acuminate for apical third, tip sharp and extending as far as extremity of abdomen. Scutellum as long as wide, swollen in middle at base, dark brown, tip concavely emarginate forming cradle for posterior process, apices acute. Tegmina slightly more than twice as long as wide, hyaline, basal fifth brown coriaceous and punctate, veins and pterostigma brown, a faint brownish macula on limbus at anal angle, apical limbus rather narrow, tip rounded. Sides of thorax with dense sordid hairs. Legs basally black, tibiae and tarsi dark brown. Abdomen brown.

MALE. Unknown.

*Measurements.* Lateral: frontal margin to tips of tegmina 5,95–6,48, to tip of posterior process 5,48–5,61; frontal: expanse of horns 4,16–4,36, width at humeral angles 2,77–2,90, at eyes 2,51.



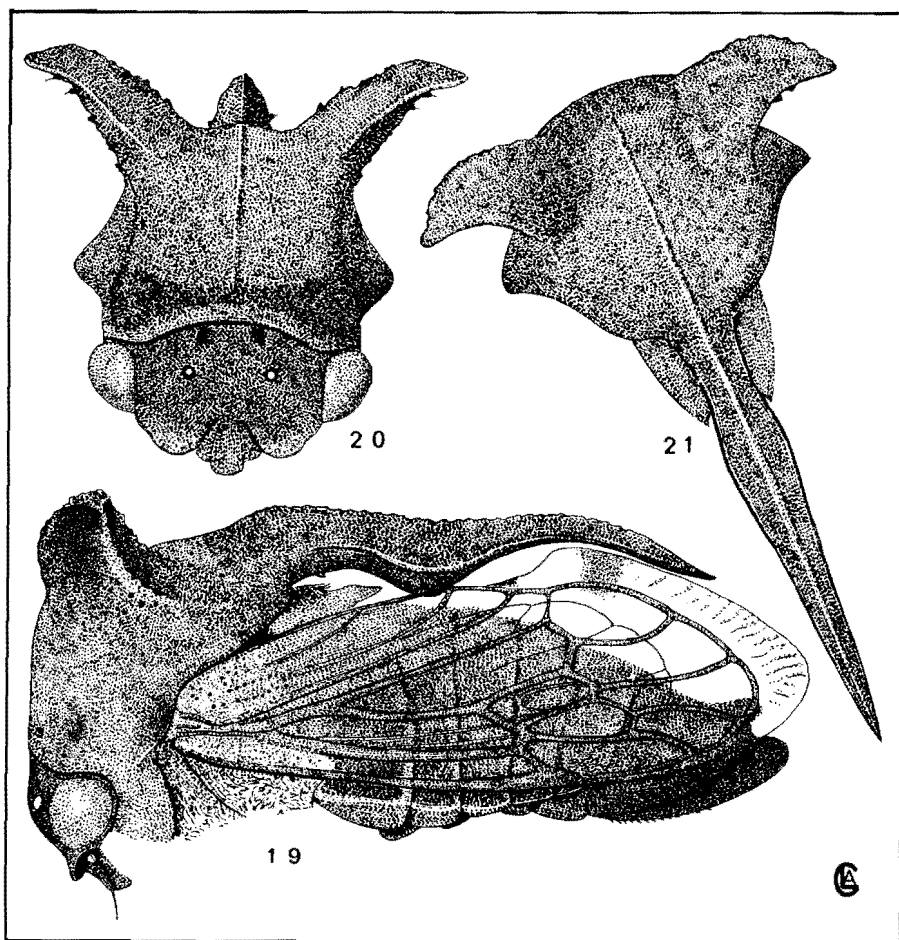
Figs 16–18. *Acanthophyes kenyensis* spec. nov. ♀. 16. lateral aspect. 17. frontal aspect. 18. dorsal aspect.

**MATERIAL EXAMINED.** 3 ♀ from Kenya: ♀-holotype; Londiani, May 1936, 2 ♀-paratypes Naivasha, July 1937, H.J.A. Turner coll. Holotype and one paratype in Coryndon Museum, one paratype in N.C.I.

***Acanthophyes rarus* spec. nov., figs 19–21**

Near *A. decens* Capener (1971), but with longer horns and posterior process more strongly ventrally amplate in middle.

**FEMALE.** Head vertical; vertex about 1.6 times wider than long, black except for castaneous lower margins, finely punctate with micro-hairs, a little convex in middle; upper margin arcuate and sinuate, lower margins obliquely sloping and



Figs 19–21. *Acanthophyes rarus* spec. nov. ♀. 19. lateral aspect. 20. frontal aspect. 21. dorsal aspect.

broadly curved to frontoclypeus. Eyes subglobose, succineous, ocelli succineous, very slightly closer to eyes than to each other and situated above the centro-ocular line. Frontoclypeus declivous, a little longer than wide across lobes, extending about half its length below lower margins of vertex, black except for castaneous tip, lobes extending about two thirds its length, rounded, tip bluntly rounded and finely carinate. Antennae castaneous.

Pronotum moderately high, castaneous, finely punctate with micro-hairs; median carina percurrent; metopidium almost twice as wide as high, a blackish transverse fascia above frontal margin including the rather small supraocular callosities; humeral angles prominent and blunt, posterior margin rounded. Suprahumeral horns

robust, directed upwards and outwards, twice as long as distance between their bases, tips slightly decurved, somewhat indistinctly tricarinate, weakly tuberculate, all surfaces weakly convex, blackish at tips laterally. Posterior process emerging robustly from posterior margin and behind disc, rising a little above level of disc but not achieving height of horns, a few scattered tubercles basally, weakly arcuate over scutellum, tricarinate, ventrally ampliate beyond scutellum and slightly laterally expanded, then acuminate and a little decurved over anal angles of tegmina, tip sharp. Scutellum triangular, a little wider than long, castaneous, somewhat swollen in middle at base, tip broadly concavely emarginate, apices acute. Tegmina 2.5 times longer than wide, clear hyaline, basal fifth coriaceous and finely punctate, base and veins castaneous, pterostigma incipient, a brownish macula on limbus at anal angle and a slight suffusion at extremity of first anal vein, limbus broad, tip subacutely rounded. Sides of thorax black with matted sordid hairs. Legs basally dark brown, tibiae and tarsi castaneous. Abdomen castaneous to black.

MALE. Similar to female but black except for apical half of posterior process, humeral angles, tip of scutellum and tibiae and tarsi, which are castaneous.

Host plant *Ziziphus zeyheriana* Sond.

Measurements. Lateral: frontal margin to tips of tegmina ♂ 4.49, ♀ 5.41, to tip of posterior process ♂ 4.36, ♀ 4.95; frontal: expanse of horns ♂ 2.44, ♀ 3.10, width at humeral angles ♂ 1.98, ♀ 2.31, at eyes ♂ 1.78, ♀ 2.05.

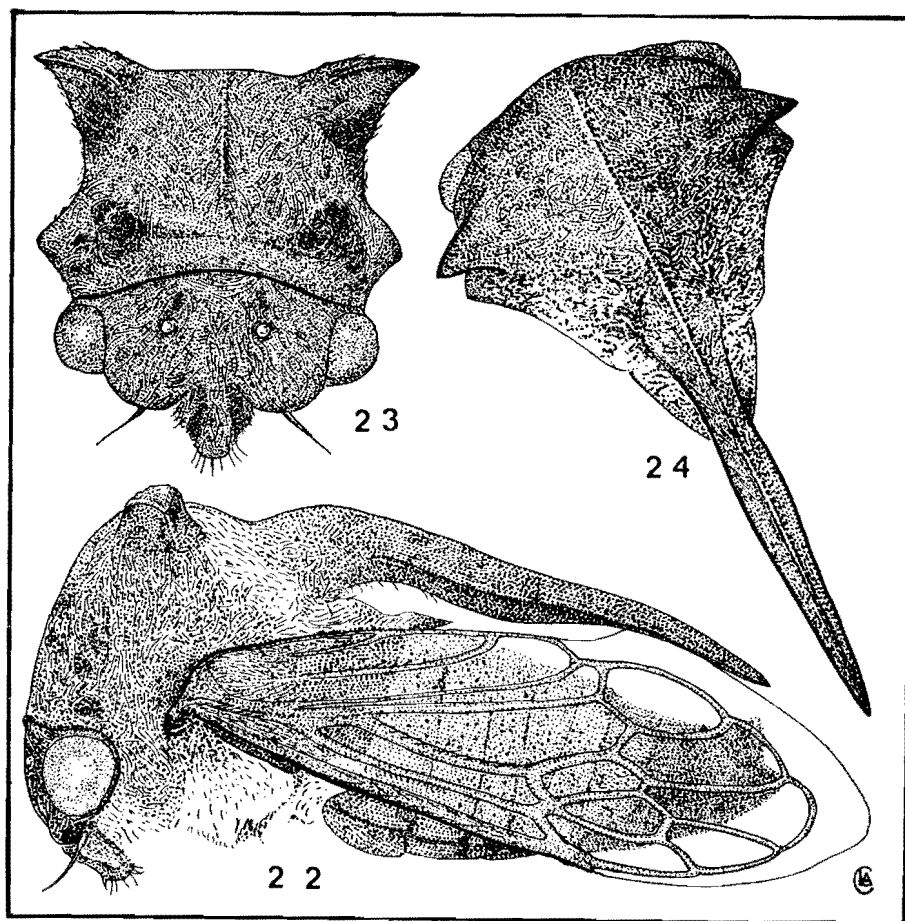
MATERIAL EXAMINED: ♀ holotype and ♂ paratype from Argent, Tvl., Dec. 19, 1939, A. L. Capener, in N.C.I.

***Distantobelus humilis* spec. nov., figs 22–24**

Near *D. natalensis* Capener (1968), but differing in more robust suprahumeral horns and posterior process, and very much smaller pterostigma.

FEMALE. Head vertical, vertex almost twice as wide as long, very weakly convex, black, finely punctate with adpressed pale golden hairs, an impunctate spot above each ocellus, upper margin arcuate and weakly sinuate, lower margins rounded and slightly sloping to frontoclypeus. Eyes subhemispherical, dull succineous, ocelli dull succineous, closer to eyes than to each other and situated above the centro-ocular line. Frontoclypeus declivous, very slightly longer than wide across lobes, extending a little more than half its length below lower margins of vertex, tip rounded and a little upturned, lobes extending obscurely almost to tip, their lateral margins about parallel and somewhat densely tomentose. Antennae brown; genae densely covered with white tomentum.

Pronotum dark brown, punctate with recumbent golden pilosity, thick white tomentous hairs below and behind horns and at base of posterior process, median carina percurrent. Metopidium slightly receding, about twice as wide as high, supra-ocular callosities large black and impunctate; humeral angles prominent and blunt, posterior angles obtusely rounded and densely tomentose, posterior margin transverse and arcuate over base of scutellum. Suprahumeral horns emerging from sides of disc above humeral angles, short and robust and outwardly directed but scarcely passing humeral angles, rather weakly tricarinate and acutely pointed, rising only slightly above level of disc, all surfaces convex. Posterior process emerging behind disc and from posterior margin, dorsally rising to about level of disc, rather robust and uniform in



Figs 22-24. *Distantobelus humilis* spec. nov. ♀. 22. lateral aspect. 23. frontal aspect. 24. dorsal aspect.

girth for basal two thirds and acuminate to tip, almost straight but ventrally weakly arcuate over scutellum, tricarinate and quadrate in section with a medio-ventral ridge for basal two thirds, impinging on anal angles of tegmina, extending about as far caudad as extremity of abdomen, tip sharp. Scutellum triangular, wider than long, convex at base, brown with white tomentous hairs very dense at basal angles, tip with a strong "U"-shaped emargination, apices sharp. Tegmina about 2.4 times longer than wide, clear hyaline, basal sixth pale brown coriaceous and punctate with short adpressed pale golden hairs, veins pale yellowish margined with very short hairs, pterostigma very small, apical limbus broad, tip subacutely rounded. Sides of thorax black covered with dense white tomentum. Legs brown, darker basally. Abdomen greyish above with black

punctuation, terminalia brown, tergites brown, with golden hairs and a more or less dense sprinkling of white tomentum.

MALE. Unknown.

*Measurements.* Lateral: frontal margin to tips of tegmina 4,56, to tip of posterior process 3,96; frontal: expanse of horns 1,99, width at humeral angles 1,81, at eyes 1,66.

MATERIAL EXAMINED. ♀-holotype from Cape Province, Rietrivier (Kimberley), 12 Nov. 1963, H.A.D. van Schalkwyk, in N.C.I.

***Vecranotus ivoriensis* spec. nov. figs 25–27**

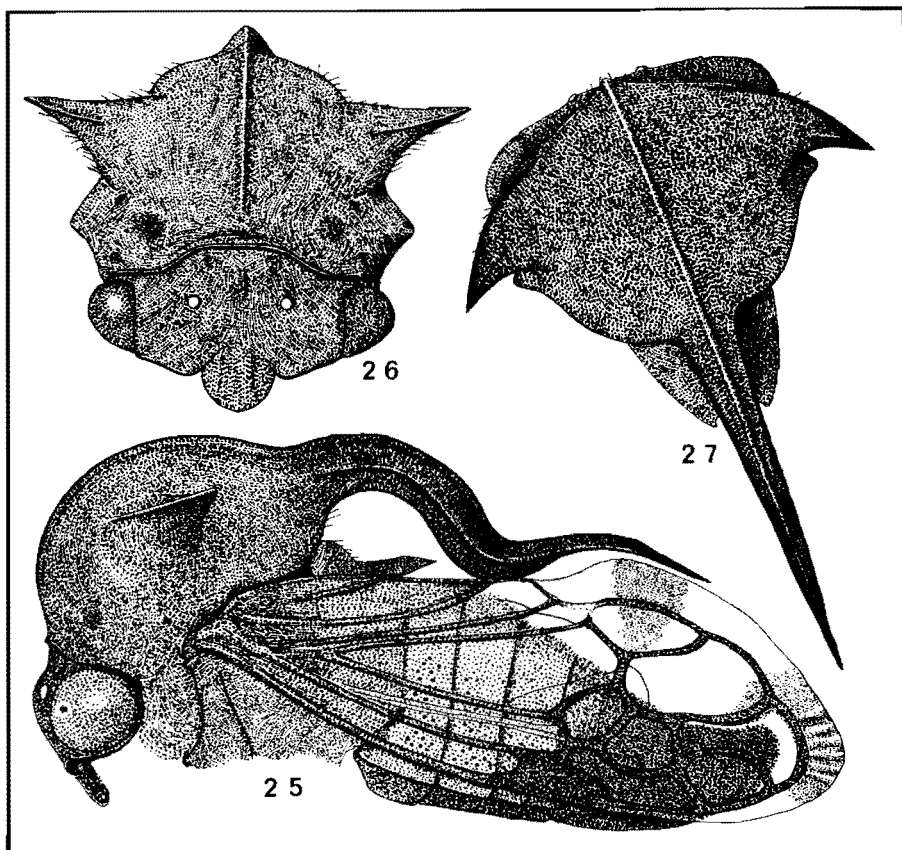
Nearest to *V. sinuatus* (Funkhouser, 1935), but horns shorter and curving backwards.

FEMALE. Head vertical; vertex 1,6 times wider than long, black, finely punctate with short adpressed silvery hairs, a little convex in middle with a small vertical carina; a small impunctate spot located below upper margin above each ocellus; upper margin arcuate and sinuate; lower margins carinate, sloping and curving to frontoclypeus. Eyes subglobose, black; ocelli brownish succineous, closer to eyes than to each other and situated above the centro-ocular line. Frontoclypeus declivous, suboval, about as long as wide, extending about two thirds its length below lower margins of vertex, lobes entirely fused.

Pronotum strongly convex, black, finely punctate with short recumbent silvery hairs, median carina strongly percurrent, sometimes ochraceous; frontal margin a little obumbrant, metopidium vertical curving into disc, supra-ocular callosities divided into four small areas by punctuation and hairs; humeral angles prominent and blunt, posterior angles rounded, posterior margin transverse and weakly arcuate over base of scutellum. Suprahumeral horns emerging about half way between humeral angles and disc, horizontal and backwardly curving, shorter than distance between their bases but extending beyond humeral angles; tricarinate, anterior carina strong, posterior carina directly above lateral carina, both short; dorsal surface planate with an incipient carina medially at tip, lateral surface convex strongly so at base, posterior surface planate; tip sharp. Posterior process emerging well behind disc and from posterior margin, sinuate and gradually acuminate to sharp tip which extends a little beyond anal angles of tegmina; strongly arcuate over scutellum then impinging on anal margins of tegmina and decurved over their anal angles. Tegmina 2,4 times longer than wide, clear hyaline; basal sixth black coriaceous, veins on basal half pale brown, on apical half dark brown to black, pterostigma rather large, about twice as long as wide, black; a brownish macula on limbus at anal angle extending to base of fourth apical cell and a similar macula on limbus at apex; tip acutely rounded. Scutellum wider at base than long, black with silvery hairs, a little medially swollen at base, tip broadly concavely emarginate, apices acute. Sides of thorax black with silvery hairs; legs black with tibiae and tarsi dark brown. Abdomen black, tergites covered with whitish bloom, terminalia black.

MALE. Unknown.

*Measurements.* Lateral: frontal margin to tips of tegmina 5,08–5,48; to tip of posterior process 4,09–4,22; frontal: expanse of horns 2,64–2,84; width at humeral angles 2,24, at eyes 2,10.



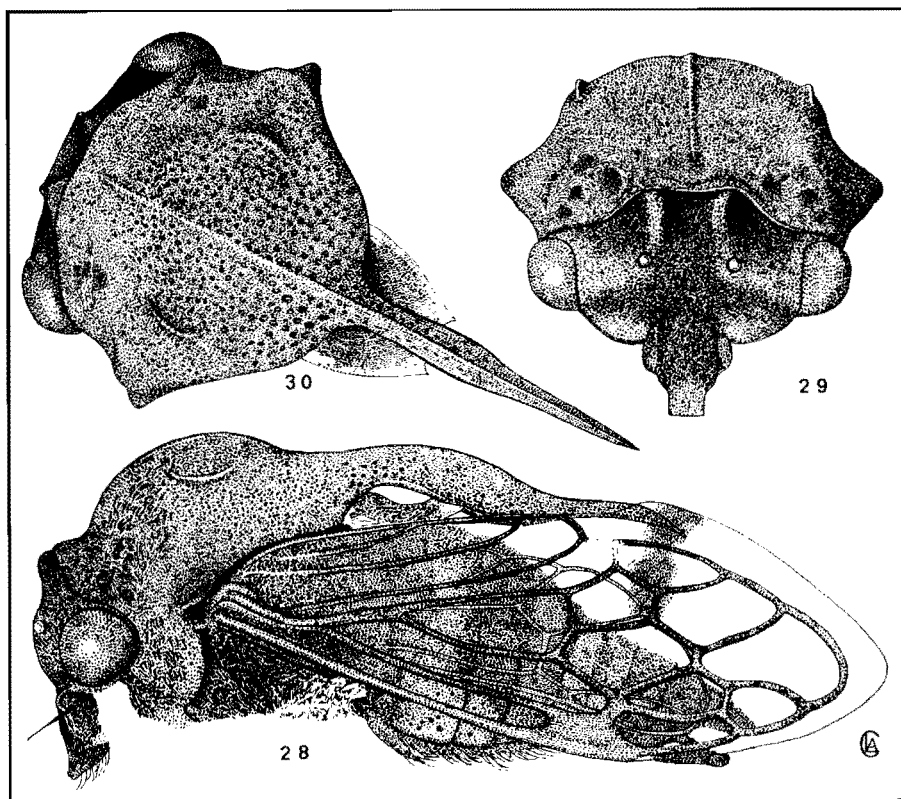
Figs 25-27. *Vecranotus ivoriensis* spec. nov. ♀. 25. lateral aspect. 26. frontal aspect. 27. dorsal aspect.

MATERIAL EXAMINED. 4 ♀ from Ivory Coast, Lamto: ♀-holotype 12 July, ♀-paratype 1 Aug. and 2 ♀-paratypes 19 Sept. 1968, coll. A. Pollet. Holotype and one paratype in O.R.S.T.O.M. and two paratypes in N.C.I.

***Leprechaunus humilis* spec. nov., figs 28-30**

Nearest to *L. cornutus* Capener (1953), but differing in the less ampliate posterior process, the suprahumeral horns reduced to curved carinae or absent, the vertex strongly moulded with a very prominent mound above each ocellus and the tip of the frontoclypeus truncate.

MALE. Head vertical; vertex strongly moulded with a strongly raised mound above each ocellus projecting beyond frontal margin of pronotum and a concave



Figs 28–30. *Leprechaunus humilis* spec. nov. ♂. 28. lateral aspect. 29. frontal aspect. 30. dorsal aspect.

depression between them, 1.4 times wider than long, finely punctate with short adpressed hairs, black except for castaneous lower margins and sometimes a fascia from cranial mounds through ocelli to eyes; upper margin strongly arcuate and sinuate, lower margins curved to frontoclypeus. Eyes subhemispherical, ochraceous, ocelli pale succineous, closer to eyes than to each other and situated slightly above the centro-ocular line. Frontoclypeus vertical, longer than wide across lobes, extending more than half its length below lower margins of vertex, lobes entirely fused, their lateral margins subparallel, extending about two thirds of total length, black except for apical third, tip abruptly truncate. Antenna ochraceous.

Pronotum shallow and strongly convex, castaneous or black, punctate, median carina percurrent, frontal margin strongly obumbrant, metopidium convex, about three times wider than high, supraocular callosities impunctate and rather small; humeral angles broad and prominent, posterior angles rounded, posterior margin curved and a little arcuate over base of scutellum. Suprahumeral horns absent or reduced to inconspicuous crescent-shaped carinae situated above humeral angles. Posterior process



weakly sinuate, emerging behind disc and from posterior margin, a little arcuate over scutellum and impinging on its tip, not quite attaining height of disc, a little ampliate beyond scutellum, tricarinate, lateral carinae rather weak, impinging on anal margins of tegmina then acuminate to sharp sometimes weakly decurved tip, extending to anal angles or about middle of fifth apical cell of tegmina. Scutellum triangular, wider than long, somewhat saddle-shaped, basally black shading to brown with margins and tip ochraceous, a few white tomentous hairs at basal angles, tip strongly concavely emarginate, apices acute. Tegmina 2,2 to 2,4 times longer than wide, clear hyaline, basal fifth castaneous coriaceous, finely punctate, subcosta, veins and pterostigma ochraceous, pterostigma twice as long as wide, a narrow brown fascia from limbus at anal angle to apex of third discoidal cell, limbus moderately broad, tip acutely rounded. Legs basally black with a few white tomentous hairs, femora blackish brown, tibiae and tarsi ochraceous brown, claws a little darker. Abdomen dark brown to castaneous with a whitish bloom, sternites with short pubescence.

FEMALE. Similar to male.

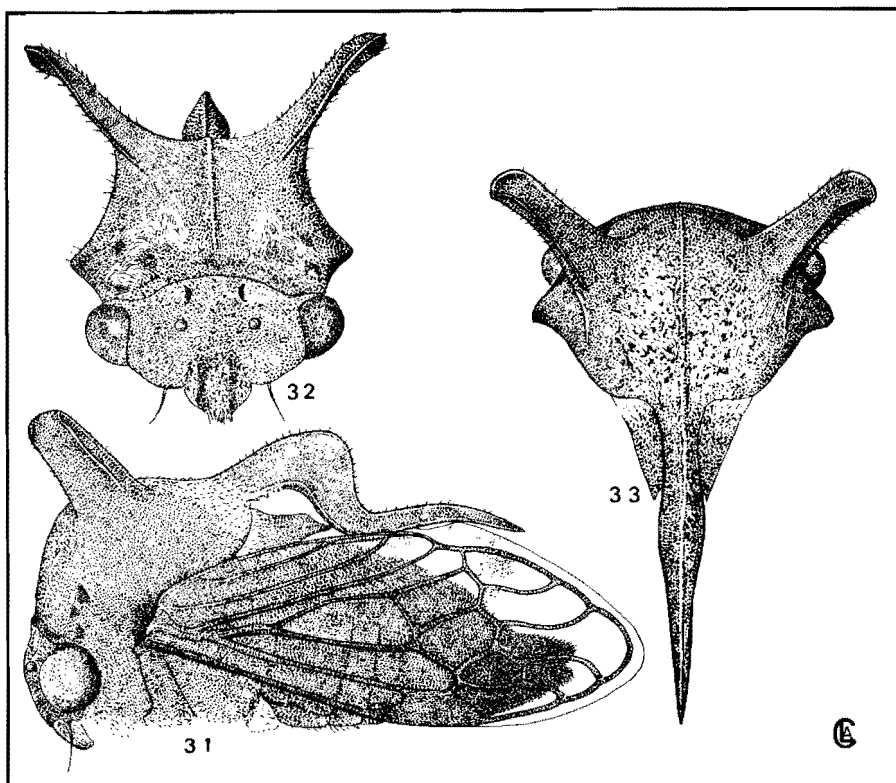
*Measurements.* Lateral: middle of vertex to tips of tegmina ♂ 3,17–3,62, ♀ 3,59, to tip of posterior process ♂ 2,36–2,69, ♀ 3,11; frontal: width at humeral angles ♂ 1,42–1,56, ♀ 1,66, at eyes ♂ 1,24–1,39, ♀ 1,39. Upper margin of vertex at centre to tip of frontoclypeus ♂ 0,85–1,00, ♀ 0,85.

MATERIAL EXAMINED. 5 ♂ 1 ♀: ♂-holotype from near Meyjes Farm, Rustenburg, 28 Dec. 1961, ♂-paratype Bon Accord Dam, Pretoria Dist. Transvaal, 10 March 1962 (on *Acacia karroo*), A. L. Capener; ♂-paratype Kafue Bridge, Zambia, 17 April 1957, A. S. Smithers, in N.C.I., and the following from the Congo: ♀-paratype Bas Congo: Kimwenza, Jan–Apr. 1956, R. P. Van Eyden, ♂-paratype Mayumbe: Luni, 24 Oct. 1923 and ♂-paratype Thysville, 30 Nov. 1952, P. Basilewsky, in M.R.A.C.

***Leprechaunus longicornis* spec. nov., figs 31–33**

This species differs from the three previously described in the long supra-humeral horns. It has been shown many times that the horns are not always a reliable character, in some instances being present in the females and absent in the males and in other cases the presence, modification or absence of these structures may occur within a genus. Our conception of the genus *Leprechaunus* must be expanded to include species such as this, with long horns.

FEMALE. Head vertical; vertex transversely convex, nearly twice as wide as long, castaneous, finely punctate with very short adpressed pale golden hairs somewhat tomentous at upper and lower margins, a small impunctate lunate spot above each ocellus, upper margin arcuate and sinuate, lower margins sloping and curving to frontoclypeus. Eyes subglobose, brownish; ocelli succineous, closer to eyes than to each other and about resting on the centro-ocular line. Frontoclypeus declivous, longer than wide across lobes, extending about half its length below lower margins of vertex, more or less densely covered with white tomentous hairs, lobes extending almost to tip, their lateral margins curved and sutures broadly impunctate. Antennae castaneous, genae densely covered with white tomentum.



Figs 31–33. *Leprechaunus longicornis* spec. nov. ♀. 31. lateral aspect. 32. frontal aspect. 33. dorsal aspect.

Pronotum convex, castaneous, finely punctate with very short adpressed pale golden pilosity which is white tomentous around and above supraocular callosities, on and behind disc and at base of posterior process. Median carina percurrent, frontal margin a little obumbrant, metopidium a little more than twice as wide as high, supraocular callosities impunctate, rather large and partly broken by tomentous white hairs; humeral angles prominent and blunt, posterior angles rounded, posterior margin transverse and arcuate over base of scutellum. Suprahumeral horns emerging from sides of disc, directed forwards, upwards and outwards, about twice as long as distance between their bases, rather weakly tricarinate, dorso-ventrally compressed and slender from frontal aspect, lateral and posterior carinae closely adjacent, apically rounded to bluntly acute tips, dorsal and lateral surfaces subplanate. Posterior process sinuate, emerging far back on pronotum and from posterior margin, rising above level of disc in a dorsally expanded crest, arcuate over scutellum and almost impinging on its tip, contiguous with anal margins of tegmina beyond scutellum, curving over anal angle and a little decurved to tip, very weakly laterally expanded beyond scutellum and

acuminate to sharp tip; tricarinate, median carina strong, lateral carinae weaker and forming lateral margins of ventral surface. Scutellum triangular, wider than long, saddle-like and swollen at base with dense white tomentum at basal angles and tomentous hairs basally, tip with a wide shallow concave emargination, apices acute. Tegmina 2,28 times longer than wide, clear hyaline, basal fifth castaneous coriaceous and finely punctate with very short adpressed hairs, veins castaneous to brown, margined with hairs and on apical half very minutely tuberculately pilose, pterostigma large, 2,6 times longer than wide, yellowish castaneous, a pale brownish suffusion from anal margin towards centre and a brownish fascia from limbus at anal angle to base of fourth apical cell, apical limbus rather narrow, tip subacutely rounded. Sides of thorax castaneous with sparse white tomentum. Legs castaneous with coxae densely tomentous. Abdomen castaneous with a greyish bloom on tergites, sternites densely covered with white tomentum.

MALE. Unknown.

*Measurements.* Lateral: frontal margin to tips of tegmina 4,75, to tip of posterior process 3,96; frontal: expanse of horns 2,84, width at humeral angles 2,31, at eyes 2,08.

MATERIAL EXAMINED. ♀-holotype from Que Que, Rhodesia, 28 Aug. 1956, C. N. Smithers, in N.C.I. Found on *Acacia*.

#### REFERENCES

- CAPENER, A. L. 1953. African Membracidae 1. *J. ent. Soc. sth. Afr.* **16** (2): 112-131.  
 ——— 1966. Contributions to the Fauna of the Congo (Brazzaville). (Mission A. Villiers and A. Descarpentries). *Bull. Inst. fr. Afr. noire, Sér. A*, **4**: 1708-1719.  
 ——— 1967. Six new species of Membracidae (Hemiptera: Homoptera) from South Africa. *J. ent. Soc. sth. Afr.* **31**: 197-207.  
 ——— 1971. New African Membracidae (Hemiptera: Homoptera). *J. ent. Soc. sth. Afr.* **34**: 17-31.  
 ——— 1972. New genera and species of African Membracidae (Hemiptera: Homoptera). *Entomology Mem. Dep. agric. tech. Serv. Repub. S. Afr.* **24**: 1-52.  
 FUNKHOUSER, W. D. 1935. New Membracidae in the Imperial Institute Collection. *Jl. N.Y. ent. Soc.* **43**: 428-434.  
 JACOBI, A. 1910. *Sjostedt's Kilim. Exped.* **XII**: 121, 122.

Manuscript received 9 March 1972.